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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,476	05/30/2001	Sreedhar Mukkamalla	50277-1517	2036

29989 7590 11/20/2003

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EXAMINER

LE, MIRANDA

ART UNIT	PAPER NUMBER
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2177

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

4

Office Action Summary

Application No.

09/871,476

Applicant(s)

MUKKAMALLA ET AL.

Examiner

Miranda Le

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- #10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of the following informalities: a dot should be inserted after the word "blocks". Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 5, 8, 13, 17, 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Mortis et al. (US Patent No. 5,832,509).

Mortis anticipated independent claims 1, 13, by the following:

As to claims 1, 13, Moshfeghi teaches "a method for database systems to access data from other database systems, the method comprising the steps of: a first database system directly storing first data in first data blocks having a first data block size" at col. 3, lines 1-39, Fig. 2;

Art Unit: 2177

“said first database system directly accessing a copy of second data blocks in which a second database system directly stored second data” col. 3, lines 1-39, col. 6, line 43 to col. 7, line 38, Fig. 2;

“said second data blocks having at least one data block with a second data block size different than said first data block size” at col. 3, lines 1-39, Fig. 2.

As to claims 5, 17, Moshfeghi teaches “each data block of said copy of said second data blocks has said second data block size” at col. 3, lines 1-39, Fig. 2.

As to claims 8, 20, Moshfeghi teaches “said first database system is a data warehouse and said second database system is a source database system for said data warehouse” at col. 3, lines 1-39, col. 1, lines 39-49, Abstract.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2177

5. Claims 2, 4, 9-11, 14, 16, 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mortis et al. (US Patent No. 5,832,509), in view of Wang et al. (US Patent No. 5,758,345).

As to claims 2, 14, Mortis does not specifically teach “the method further includes the step of integrating said copy of said second data blocks within said first database system as a tablespace that includes said copy of said second data blocks”. However, Wang teaches this limitation at col. 8, line 51 to col. 9, line 67.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Mortis with the teachings of Wang to include “the method further includes the step of integrating said copy of said second data blocks within said first database system as a tablespace that includes said copy of said second data blocks” in order to provide a method and program that generates a logical volume map for the tablespaces distributed over the distributed processor system, and further generates scripts to implement the tablespace structure into a physical database.

As to claims 4, 16, Mortis does not expressly teach “the method further includes the step of detaching one or more tablespaces from said second database system, wherein said one or more tablespaces include said second data blocks”. However, Wang teaches this limitation at col. 5, lines 4-23.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Mortis with the teachings of Wang to include “the method

Art Unit: 2177

further includes the step of detaching one or more tablespaces from said second database system, wherein said one or more tablespaces include said second data blocks” in order to provide a method and program that generates a logical volume map for the tablespaces distributed over the distributed processor system, and further generates scripts to implement the tablespace structure into a physical database.

As to claims 9, 21, Mortis does not explicitly teach “the step of integrating said copy of said second data blocks within said data warehouse as a tablespace that includes said copy of said second data blocks”. However, Wang teaches this limitation at col. 2, line 66 to col. 3, line 8, col. 4, lines 27-36.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Mortis with the teachings of Wang to include “the step of integrating said copy of said second data blocks within said data warehouse as a tablespace that includes said copy of said second data blocks” in order to provide a method and program that generates a logical volume map for the tablespaces distributed over the distributed processor system, and further generates scripts to implement the tablespace structure into a physical database.

As to claims 10, 22, Mortis does not specifically teach “wherein first data files contain said first data blocks and second data files contain said second data blocks; and wherein the method further includes the step of generating a mapping: between said first data files and said

Art Unit: 2177

first data block size, and between said second data files and said second data block size”.

However, Wang teaches this limitation at col. 5, line 4 to col. 6, line 24, col. 4, lines 22-56.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Mortis with the teachings of Wang to include “wherein first data files contain said first data blocks and second data files contain said second data blocks; and wherein the method further includes the step of generating a mapping: between said first data files and said first data block size, and between said second data files and said second data block size” in order to provide a method and program that generates a logical volume map for the tablespaces distributed over the distributed processor system, and further generates scripts to implement the tablespace structure into a physical database.

As to claims 11, 23, Mortis does not explicitly teach “wherein a first tablespace contains said first data blocks and a second tablespace contains said second data blocks; and wherein the method further includes the step of generating a mapping: between said first tablespace and said first data block size, and between said second tablespace and said second data block size”.

However, Wang teaches this limitation at col. col. 5, line 4 to col. 6, line 24, col. 4, lines 22-56.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Mortis with the teachings of Wang to include “wherein a first tablespace contains said first data blocks and a second tablespace contains said second data blocks; and wherein the method further includes the step of generating a mapping: between said first tablespace and said first data block size, and between said second tablespace and said second data block size” in order to provide a method and program that generates a logical

Art Unit: 2177

volume map for the tablespaces distributed over the distributed processor system, and further generates scripts to implement the tablespace structure into a physical database.

6. Claims 3, 6, 15, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mortis et al. (US Patent No. 5,832,509), in view of McKearney et al. (US Patent No. 6,035,298).

As to claims 3, 15, Mortis does not expressly teach “the step of accessing a copy of second data blocks includes storing user data in said copy of said second data blocks”. However, McKearney teaches this limitation at col. 4, line 18 to col. 5, line 67, col. 6, lines 1-64.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Mortis with the teachings of McKearney to include “the step of accessing a copy of second data blocks includes storing user data in said copy of said second data blocks” in order to provide a technical process for facilitating an interaction with database such that much of the technical burden is taken by the machines constituting the network, thereby allowing managers and executives to gain easy access to a consistent, substantially intuitive platform.

As to claims 6, 18, Mortis does not specifically teach “the step of generating metadata that specifies a plurality of block sizes for data blocks directly accessible to said first database system”. However, McKearney teaches this limitation at col. 8, lines 6-41.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Mortis with the teachings of McKearney to include “the step of generating metadata that specifies a plurality of block sizes for data blocks directly

Art Unit: 2177

accessible to said first database system” in order to provide a technical process for facilitating an interaction with database such that much of the technical burden is taken by the machines constituting the network, thereby allowing managers and executives to gain easy access to a consistent, substantially intuitive platform.

7. Claims 12, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mortis et al. (US Patent No. 5,832,509), in view of Agarwal et al. (US Patent No. 5,822,749).

As to claims 12, 24, Mortis does not expressly teach “wherein said first database system includes a buffer cache in which said first database system stores data blocks of multiple sizes; and wherein said method further includes the step of storing said first data blocks and said second data blocks in said buffer cache”. However, Agarwal teaches this limitation at col. 8, line 28 to col. 9, line 46, col. 10, lines 4-56, Abstract.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Mortis with the teachings of Wang to include “wherein said first database system includes a buffer cache in which said first database system stores data blocks of multiple sizes; and wherein said method further includes the step of storing said first data blocks and said second data blocks in said buffer cache” in order to provide database system and methods for improving execution speed of database queries (e.g., for transaction processing and for decision support) by optimizing use of buffer caches.

Art Unit: 2177

8. Claims 7, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mortis et al. (US Patent No. 5,832,509), in view of McKearney et al. (US Patent No. 6,035,298), and further in view of Wang et al. (US Patent No. 5,758,345).

As to claims 7, 19, Mortis does not explicitly teach "said metadata defines tablespaces and specifies for each tablespace of said tablespaces a particular data block size for all data blocks in said tablespace; and the method further includes the step of integrating said copy of said second data blocks within said first database system as at least one tablespace that includes said copy of said second data blocks, and wherein the step of integrating includes modifying said metadata to reflect said second data block size for said at least one tablespace". However, Wang teaches this limitation at col. 5, lines 4-23, col. 7, line 58 to col. 8, line 67, col. 9, lines 1-67.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Mortis, McKearney with the teachings of Wang to include "said metadata defines tablespaces and specifies for each tablespace of said tablespaces a particular data block size for all data blocks in said tablespace; and the method further includes the step of integrating said copy of said second data blocks within said first database system as at least one tablespace that includes said copy of said second data blocks, and wherein the step of integrating includes modifying said metadata to reflect said second data block size for said at least one tablespace" in order to provide a method and program that generates a logical volume map for the tablespaces distributed over the distributed processor system, and further generates scripts to implement the tablespace structure into a physical database.

Art Unit: 2177

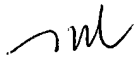
Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (703) 305-3203. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached on (703) 305-9790. The fax number to this Art Unit is (703) 872-9306. The TC 2100's Customer Service number is (703) 306-5631.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.



Miranda Le
October 17, 2003



GRETA ROBINSON
PRIMARY EXAMINER